



CARDIAC ARRHYTHMIAS

RISK OF RECURRENT CARDIAC EVENTS AFTER ONSET OF MENOPAUSE IN WOMEN WITH LONG QT SYNDROME TYPES 1 AND 2

ACC Oral Contributions

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Background: LQTS women experience increased risk for cardiac events after the onset of adolescence and during the postpartum period, that is more pronounced among carriers of the LQT2 genotype. We hypothesized that the hormonal changes associated with menopause may affect clinical risk in this population.

Methods: The Prentice-Williams-Peterson conditional gap time model was utilized to evaluate the risk for recurrent syncope during the transition- and post- menopausal periods (5-years before- and after- the reported age at onset of menopause, respectively) among 282 LQT1 (n=151) and LQT2 (n=131) women enrolled in the LQTS Registry.

Results: Multivariate analysis showed that LQT2 women experienced respective 3.4- ($p=0.005$) and 8.1- ($p<0.001$) fold increase in the risk of recurrent cardiac events during the transition- and post-menopausal periods as compared with the reproductive period. In contrast, LQT1 women experienced an 81% ($p=0.05$) risk-reduction after the onset of menopause (p -value for genotype-by-menopause interaction = 0.02). Beta-blocker therapy was associated with a significant reduction in the risk of recurrent cardiac events during follow-up among both LQT1 and LQT2 women.

Conclusions: The onset of menopause is associated with a significant increase in the risk of cardiac events in LQT2 women, suggesting that careful follow-up and continued long-term therapy are warranted in this population.

Fig. 2

